

EtherNet/IP Network



The Ethernet Industrial (EtherNet/IP) network protocol is an open industrial-networking standard that supports both real-time I/O messaging and message exchange. The EtherNet/IP network uses off-the-shelf Ethernet communication chips and physical media.

For these requirements	Select this interface
Control I/O modules and drives Act as an adapter for I/O on remote EtherNet/IP links Communicate with other EtherNet/IP devices (messages and HMI) Bridge EtherNet/IP links to route messages to devices on other networks	1756-EN2F, 1756-EN2FK 1756-EN2T, 1756-EN2TK, 1756-EN2TXT 1756-EN2TP, 1756-EN2TPK, 1756-EN2TPXT 1756-EN2TR, 1756-EN2TRK, 1756-EN2TRXT 1756-EN4TR, 1756-EN4TRK, 1756-EN4TRXT 1756-ENBT , 1756-ENBTK
Support Device Level Ring (DLR) and linear topologies	1756-EN2TR, 1756-EN2TRK, 1756-EN2TRXT 1756-EN3TR, 1756-EN3TRK 1756-EN4TR, 1756-EN4TRK, 1756-EN4TRXT
Support Parallel Redundancy Protocol (PRP)	1756-EN2TP, 1756-EN2TPK, 1756-EN2TPXT 1756-EN4TR ⁽¹⁾ , 1756-EN4TRK ⁽¹⁾ , 1756-EN4TRXT ⁽¹⁾
Support redundant adapters ⁽²⁾	1756-EN4TR, 1756-EN4TRK, 1756-EN4TRXT
Provide control in environments where temperatures range from -25...+70 °C (-13...+158 °F)	1756-EN2TPXT 1756-EN2TRXT 1756-EN2TXT 1756-EN4TRXT
Secure access to a control system from within the plant network	1756-EN4TR, 1756-EN4TRK, 1756-EN4TRXT

(1) 1756-EN4TR supports PRP with revision 4.001 and higher firmware.

(2) Redundant adapters require version 3.x and higher firmware.

For more information on redundant adapters and Ethernet, see the ControlLogix EtherNet/IP Network User Manual, publication [1756-UM004](#).

EtherNet/IP Network Specifications

Table 1 - ControlLogix EtherNet/IP Connections Specifications⁽¹⁾

Cat. No.	Connections		CIP Unconnected Messages (backplane + Ethernet)
	TCP	CIP ⁽²⁾	
1756-ENBT	64	128	64 + 64
1756-EN2F	128	256	128 + 128
1756-EN2T	128	256	128 + 128
1756-EN2TP	128	256	128 + 128
1756-EN2TR	128	256	128 + 128
1756-EN3TR	128	256	128 + 128
1756-EN4TR	512	1000 I/O 528 ⁽³⁾	256+256

(1) There are 1000 CIP™ I/O connections and 528 CIP messaging connections.

(2) CIP connections can be used for all explicit or all implicit applications. For example, a 1756-ENBT module has a total of 128 CIP connections that can be used for any combination of connections.

(3) There are 1000 explicit connections and 528 implicit connections.